

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) A database query set-up unit for combining a set of search criteria in order to set up a database query, comprising:

a contribution stack for storing search criteria provided by at least one user or by the system in order of occurrence, whereby each new search criterion provided by said at least one user or by the system is pushed onto said contribution stack;

means for deriving a current information state from said contribution stack;

means for relaxing the search constraints of a database query which suppress at least one of said set of search criteria contained in said contribution stack when said current information state is derived,

wherein said means for relaxing the search constraints of a database query select the search criteria to be suppressed according to user profiles, and/or according to context information,

wherein each time a new search criterion is provided, a determination is made whether said new search criterion refers to an attribute that has already been specified by an earlier search criterion stored in said contribution stack,

wherein when said new search criterion refers to an attribute that has already been specified by an earlier search criterion in said contribution stack, said earlier search criterion is

erased from said contribution stack, and said new search criterion is pushed onto said contribution stack,

wherein an intermediate entry which has been added to the contribution stack between said new search criterion and said earlier search criterion is maintained within the set of search criteria, ~~upon altering the search constraints;~~

whereby said current information state is formed from a subset of the set of search criteria contained in said contribution stack, and said current information state is used for accessing a database.

2. (Previously Presented) The database query set-up unit according to claim 1, wherein the order in which said search criteria are provided by said at least one user or by the system determines a hierarchy of dependencies between said search criteria.

3- 7. (Canceled)

8. (Previously Presented) The database query set-up unit according to claim 1, wherein at least the most recent search criterion stored in said contribution stack is suppressed when said current information state is derived.

9. (Previously Presented) The database query set-up unit according to claim 1, wherein at least the oldest search criterion stored in said contribution stack is suppressed when said current information state is derived.

10. (Previously Presented) The database query set-up unit according to claim 1, wherein search criteria suppressed when said current information state is derived are erased from said contribution stack.

11. (Previously Presented) The database query set-up unit according to claim 1, wherein search criteria suppressed when said current information state is derived are erased from said contribution stack when the query yields an acceptable result

12. (Previously Presented) The database query set-up unit according to claim 1, wherein search criteria suppressed when said current information state is derived are maintained within said contribution stack.

13. (Previously Presented) The database query set-up unit according claim 1, wherein said search criteria are obtained by means of an interactive system based on an artificial language.

14. (Previously Presented) The database query set-up unit according to claim 1, wherein said search criteria are obtained from said at least one user by a natural language dialogue system.

15. (Currently Amended) A method for setting up database queries by combining a set of search criteria, comprising:

pushing search criteria provided by a criteria source onto a contribution stack in the order of occurrence;

deriving a current information state from said contribution stack ,

whereby said current information state is formed from a subset of the set of search criteria contained in said contribution stack;

relaxing the search constraints of a database query by suppressing at least one of said set of search criteria contained in said contribution stack when said current information state is derived;

selecting the search criteria to be suppressed according to context information, and/or according to user profiles,

wherein each time a new search criterion is provided, a determination is made whether said new search criterion refers to an attribute that has already been specified by an earlier search criterion stored in said contribution stack,

wherein when said new search criterion refers to an attribute that has already been specified by an earlier search criterion in said contribution stack, said earlier search criterion is erased from said contribution stack, and said new search criterion is pushed onto said contribution stack,

wherein an intermediate entry which has been added to the contribution stack between said new search criterion and said earlier search criterion is maintained within the set of search criteria; ~~upon altering the search constraints;~~ and

setting a database query corresponding to said current information state .

16. (Previously Presented) The method according to claim 15, wherein the order said search criteria are provided by said criteria source determines a hierarchy of dependencies between said search criteria.

17-21. (Canceled)

22. (Previously Presented) The method according to claim 15, further comprising suppressing at least the most recent search criterion stored in said contribution stack when said current information state is derived.

23. (Previously Presented) The method according to claim 15, further comprising suppressing at least the oldest search criterion stored in said contribution stack when said current information state is derived.

24. (Previously Presented) The method according to claim 15, further comprising erasing search criteria from said contribution stack that have been suppressed when said current information state is derived.

25. (Previously Presented) The method according to claim 15, further comprising maintaining search criteria within said contribution stack that have been suppressed when said current information state is derived.

26. (Previously Presented) The method according to claim 15, further comprising obtaining said search criteria based on an artificial language.

27. (Previously Presented) The method according to claim 15, further comprising obtaining said search criteria based on a natural language dialogue system.

28. (Canceled)

29. (Canceled)

30. (Currently Amended) A method, stored on a computer-readable medium, that is executed by a processor to combine a set of search criteria in order to set up a database query, the method comprising:

storing search criteria provided by at least one user or by the system in order of occurrence,

pushing each new search criterion provided by said at least one user or by the system onto a contribution stack;

deriving a current information state from said contribution stack;

relaxing the search constraints of a database query which suppress at least one of said set of search criteria contained in said contribution stack when said current information state is derived,

wherein said step of relaxing the search constraints of a database query selects the search criteria to be suppressed according to user profiles, and/or according to context information,

wherein each time a new search criterion is provided, a determination is made whether said new search criterion refers to an attribute that has already been specified by an earlier search criterion stored in said contribution stack,

wherein when said new search criterion refers to an attribute that has already been specified by an earlier search criterion in said contribution stack, said earlier search criterion is erased from said contribution stack, and said new search criterion is pushed onto said contribution stack,

wherein an intermediate entry which has been added to the contribution stack between said new search criterion and said earlier search criterion ~~wherein an intermediate entry~~
is maintained within the set of search criteria; ~~upon altering the search constraints;~~

forming said current information state from a subset of the set of search criteria contained in said contribution stack; and

accessing a database using said current information state.

31. (Currently Amended) A method, stored on a computer-readable medium, for setting up database queries by combining a set of search criteria, the method comprising:

pushing search criteria provided by a criteria source onto a contribution stack in the order of occurrence;

deriving a current information state from said contribution stack,

forming said current information state from a subset of the set of search criteria contained in said contribution stack;

relaxing the search constraints of a database query by suppressing at least one of said set of search criteria contained in said contribution stack when said current information state is derived;

selecting the search criteria to be suppressed according to context information, and/or according to user profiles,

wherein each time a new search criterion is provided, a determination is made whether said new search criterion refers to an attribute that has already been specified by an earlier search criterion stored in said contribution stack,

wherein when said new search criterion refers to an attribute that has already been specified by an earlier search criterion in said contribution stack, said earlier search criterion is erased from said contribution stack, and said new search criterion is pushed onto said contribution stack,

wherein an intermediate entry which has been added to the contribution stack between said new search criterion and said earlier search criterion ~~wherein an intermediate entry~~ is maintained within the set of search criteria; ~~upon altering the search constraints;~~ and

setting a database query corresponding to said current information state.